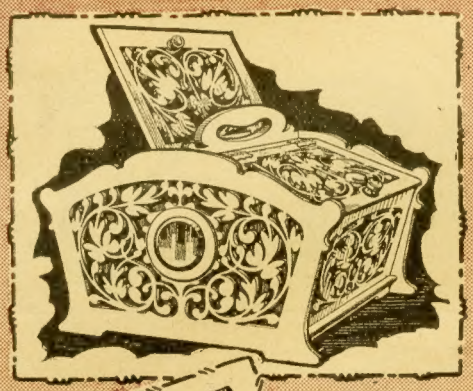
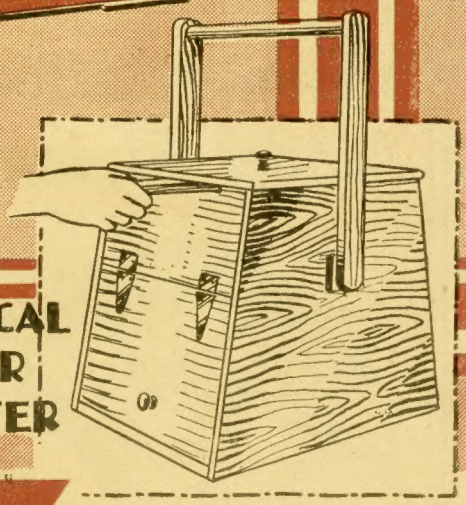
Hobbies WEEKLY



NOVEL WORKING TOY PATTERNS

PORTRAITS CUT IN WOOD



MECHANICAL CINDER SIFTER

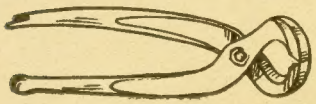
2D.

February 16th. 1935

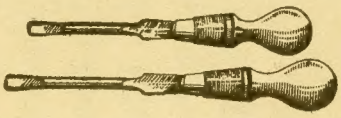
Vol. 79. No. 2052

THE FRETWORKER'S AND HOME CRAFTSMAN'S JOURNAL

STRONG STEEL PINCERS — 1/2



SCREWDRIVERS
3in. 8d. 4in. 9d. 5in. 10d.



LIGHT CRAMPS
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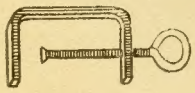

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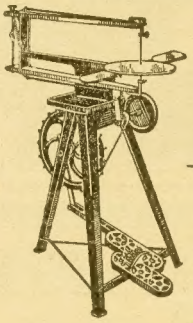

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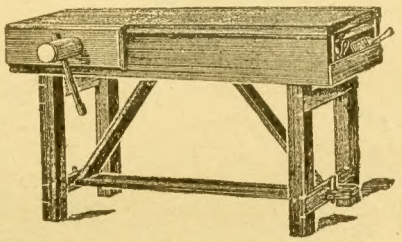

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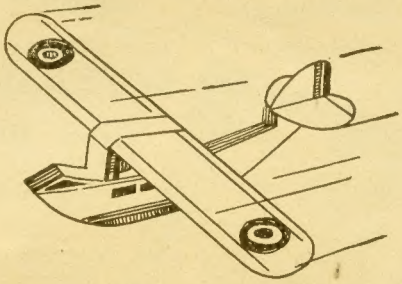

6D.

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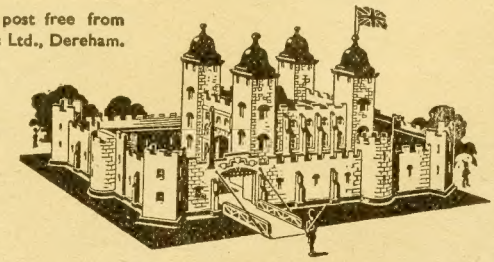
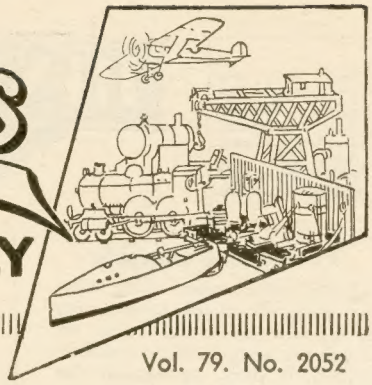


This Splendid toy Fort model is the design of the year. Made from lowly priced materials it is worth two or three guineas when completed.

Hobbies WEEKLY



February 16th. 1935

Letters should be addressed to The Editor, Hobbies Weekly, Dereham, Norfolk.

Vol. 79. No. 2052

NOTES of the WEEK

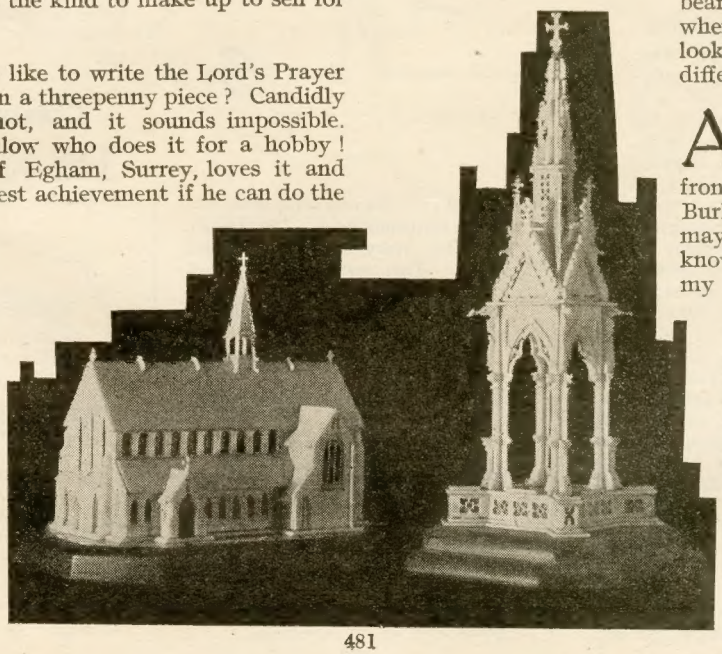
Thank you for Letters !—Make a Wool Winder — Microscopic Writing — Two interesting Models—A Town Hall Replica.

MAY I express my gratitude to the many readers who write their appreciation of the good things appearing in these pages. The planning and selection of them entails a considerable amount of work, but these letters are very acceptable to tell me how much they are enjoyed. It is, of course, impossible to give everyone what he wants every week, but there is enough variety in these pages, I know, to make the book a wonderful twopennyworth.

I HAVE got another special novelty again for next week. It is a Wool Winder which will make a big appeal to the ladies. They will want one made, for sure. Then they will want one to give to a friend. It is a real practical article which every woman who knits or crochets will require. And it is easy to make and only costs just only 1/9. The pattern is just the kind to make up to sell for profit.

WOULD *you* like to write the Lord's Prayer six times on a threepenny piece ? Candidly I would not, and it sounds impossible. But there is a fellow who does it for a hobby ! Charles Gunner of Egham, Surrey, loves it and counts it his greatest achievement if he can do the task mentioned above.

The writing is done with a finely pointed piece of silver on a card prepared with a thin wash of Chinese white water colour. To write the Lord's Prayer ten times on the space of sixpence took about 50 minutes —five minutes for each prayer.



THE two excellent models illustrated were the work of C. Beane of Hobart Rd., Barkingside, Essex. The Albert Memorial was made from one of our early designs, but the church model was planned and made by Mr. Beane. It is cut in ivorine (1/25in. thick) and can be lighted inside to give the effect of stained glass windows through the tortoiseshell which is used for the purpose. The whole model is only 4ins. long.

A 4ft. high model of Berwick Town Hall has also been made by an unemployed handyman — John Dawson, of West Street. He employed a fretsaw, of course, and has added all the characteristics and decorations of the actual building, even to the ancient stocks and the small bell above the butter market. This making of local buildings is certainly on the increase and readers should bear the fact in mind when they are on the look out for something different to do.

A SPECIAL note of interest to Scouts comes from A. H. Law of Burlton, Salop. " You may be interested to know," he says, "that my Scouts cleared £3 12s. 0d. at their Xmas Concert from sale of articles made from your designs; thereby enabling them to get Troop flag and Cubs' jerseys. The Toy Fort and Doll's House are being made now."

The Editor

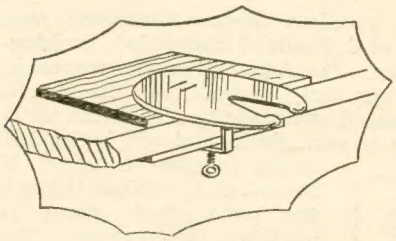
Send your own simple tips to The Editor, Hobbies Weekly, Dereham, Norfolk. Keep them short and add rough pencil sketches if possible.

HINTS AND TIPS WORTH KNOWING

For original Tips published the sender will receive one of Hobbies Self-filling Fountain Pens. We cannot acknowledge or print all tips sent in.

To Prevent Slipping

SOMETIMES when doing fretwork, the cutting table is apt to slip and turn on the bench. Or if you are using it on a polished table it is likely to scratch the



surface. To overcome this a simple plan is to put a thin piece of wood between the table and the metal, both on top and underneath. Hold the lower piece when turning the cramp, to prevent it twisting out of position.

A Binding Holder

WHEN you have an old book with the pages torn, tear them all out and use the binding case for putting all sorts of little bits of paper and odd notes or cuttings in.

Copying Photographs

HERE is an easy way, using little time or equipment. All that is needed is a packet of gaslight paper, the necessary developer and hypo, and a printing frame. Suppose the copy is to be taken from a book, lay the book on the table open at the page to be copied, and place a sheet of gaslight paper face down on it. Next cover with a sheet of clear glass and expose to the light about 60 to 80 seconds, meantime holding the glass in position. The glass is merely to keep the paper in contact with the original. Give a full development to get the negative as dark as possible. Fix, dry and print in the usual way, giving an exposure of 1 minute at six inches from an incandescent light. Develop the paper and the result will be an exact copy of the original. If the copy is to be taken from a photograph all that need to be done is to place in a printing frame and work as though ordinary printing.

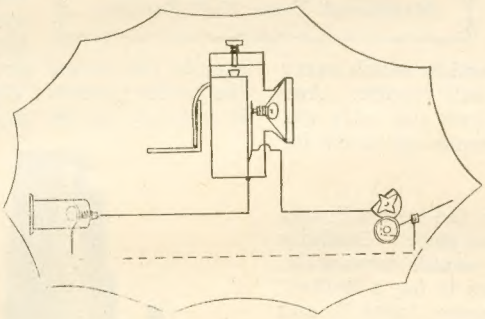
Save Your Pockets

MANY cyclists and electricians who carry small tools such as a screwdriver, find they make holes in their pockets. This can easily be stopped by covering the steel part with a small length of hose pipe or rubber tubing of a similar character, whilst other tools can be dealt with in the same way.

Flashing Rear Light

IF one does not use a dynamo, the use of a rear lamp is often decided against on the grounds of expense. Here is a method by which cyclists may carry one at a minimum of expense provided they have a cyclometer fitted.

By looking at the diagram it will



be seen that the rear lamp does not give a continuous light, but flashes once for every revolution of the wheel. This serves to minimise expense and also to attract the attention better than would a steady light.

It is of course essential that both the front lamp and the cyclometer should be insulated from the bicycle frame.

A Handy Nail Holder

THE home handyman will find that he uses the nail punch quite a lot when making separate articles to be nailed together. The nail to be used is held by means of a fountain pen clip slipped over a nail punch so the fingers are quite clear of the hammer.

To Find Your Bearings

TO find your bearings in the daytime, point the hour hand of a watch at the sun. Now imagine a line drawn between the hour hand and twelve. This gives North and South. Allow an hour for the changing of the clock for "summer time" if it happens to be during those months.

Accumulator Aquarium

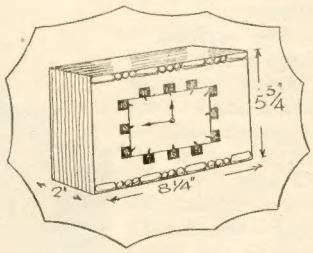
OBTAIN an old accumulator and take out the plates by breaking the wax on the top of the accumulator. Then empty the acid away and clean the glass bowl that is left with hot water. You will now have a small aquarium which will hold water snails, or tiddlers or other little fish till you can afford to buy a proper aquarium.

A Tin-opener Screwdriver

WHEN you happen to be short of a very small screwdriver, take an opener (these are included with most sardine tins) and file both sides down till a good edge is obtained. This is quite an efficient screwdriver for small screws as used in fretwork, etc.

Converting a Clock

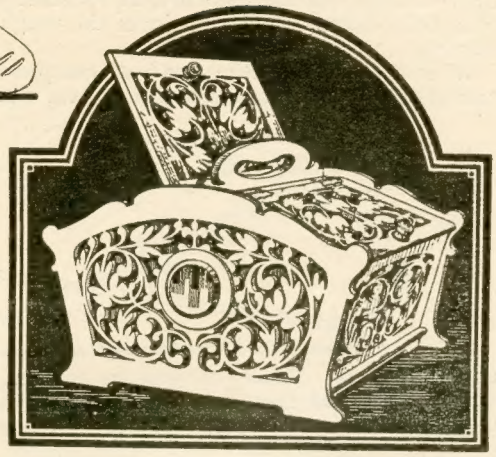
THE picture is of a modern clock built from the works of an alarm. The case itself is in



thin fretwood with a thicker piece added to the base for weight. The numerals of the face were figures cut from a calendar date pad, and the beading is Hobbies "ball and sausage" of suitable size.

The FRETWORKER

OUR GIFT CHART



LADY'S WORKBOX

A POPULAR piece of work which can be made by almost any reader, is illustrated on this page, and forms the subject of the design sheet this week. Further copies of the chart (No. 2052) can be obtained separately, and it is certainly worth getting another one in order to have this for reference purpose as the various parts are cut out.

The construction is quite simple because it only consists of a floor and four sloping sides. These sides are fretted to an attractive design, and this work is made to stand up in strong relief by backing it with suitable stiff linen cloth of the same material as imitation leather.

A piece of work such as this can, of course, be cut out in almost any common fretwood, and all the parts are 3/16in. thick with the exception of the two small overlays for the mirror, which are from ⅛in. wood.

The Wood Parcel

Further to help the worker, who has not the pieces of wood at hand, a parcel is made up complete with planed boards, and supplied ready to the size required for 3/-. The workbox is fitted also with two hinged lids, and although all is one compartment inside, it is an easy matter if the worker so desires, to put a centre partition in and so make the space to two compartments. The general construction is clearly shown by the broken-away view at Fig. 1, and it can be seen here how the two sloping lids are hinged up to the flat portion of the top.

Dimensions

The overall size of the completed box is 12¼ins. long, 7ins. wide and 8ins. high. All the patterns required are shown full size on the design sheet, so it is a simple matter to cut them out right away, and paste them down to the wood. Notice in doing this, that the grain runs in the direction of the arrows printed on each part, as this will serve to provide the greatest strength where required.

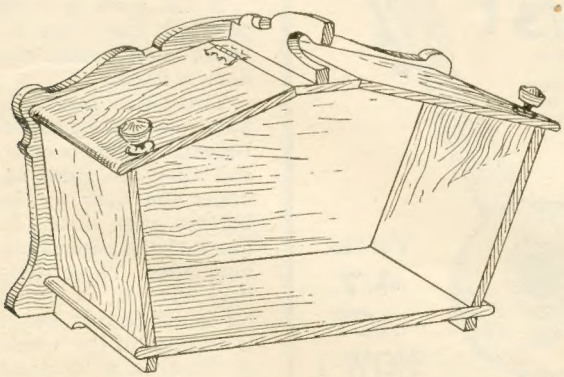


Fig. 1—A cut-away view showing construction.

Two of each of the sides are required, and this is where the owner of a machine has a big advantage because he can cut the two together quite easily. The handframe worker who is an expert and holds his saw frame upright, can, of course, do the same, but the work is not so easy, and it is possibly more advisable to do each piece separately than try to do two together and ruin one of them.

The total thickness is ⅜in. and this is certainly not too much to undertake on the fretmachine because both hands are free to turn the work as required, whilst the blade in the machine is bound to work vertically.

Cutting in Duplicate

If the parts are cut two at a time, the two boards are nailed together round the outside of the pattern with one or two fretnails also put through where waste pieces will be cut out later. These nails should be long enough to pass right through the two boards and be turned under the lower one. The pattern is pasted on the top, and then the ordinary method of fretwork undertaken. The pieces should all be cut and cleaned before the construction is actually undertaken.

Cutting Hints

In the cutting, the main point is to notice that the continuity of the curves is preserved, and that the links which hold the various parts of the design are not cut so far as to make them weak. Follow the line of the design carefully, cutting actually on it.

Use a fine saw and pay particular attention to the acute angles. Do not let the saw jump off the cutting line and make a nasty jab into the opposite side of the wood. This can be prevented by maintaining a strict control on the saw frame, and

Lady's Workbox—*(continued)*

holding the wood down firmly to the table. If the pieces are being taken separately, the outer edge can be cut first because this provides a smaller piece of wood to handle, and so reduces the weight in turning.

When the actual cutting has been completed, a note should be made of the position of the various

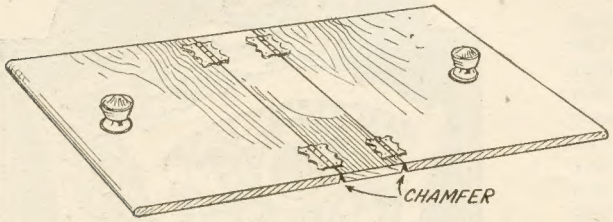


Fig. 2—How the lids and crossrail are made up.

adjoining parts. These positions are indicated by dotted lines, and should be marked off in some method so they are obvious even when the remains of the paper pattern have been cleaned away. In some instances screw holes are indicated, and these can be made now with a small drill bit. Where no drill holes are shown, mark a small pin hole with a pricker at the corner of the position where other pieces will fit.

Mark the Position

For instance, the floor is indicated on the pattern of the sides, and unless you make some mark now to show how high it is to come, you will be at a loss when fitting that part in position. The same applies to the sloping ends which are set at an angle about ½in. beyond the fretted portion of the sides. Again, the position of the lid and top should be marked carefully.

The actual construction is simple, and we have purposely omitted mortise and tenon or similar joints, in order to make the whole thing straightforward.

The Floor

The floor comes between the two main sides, and can be glued horizontally in place with little blocking pieces underneath to strengthen it. Then between the two long sides the two shorter ends are added.

Note that the bottom edge of these ends has to be slightly chamfered—as indicated in the section—in order to let them bed down on the floor and yet come square to the lid. Get this angle by careful measurement, and then glue the pieces in place. Again, little fillets can be put in to strengthen the corner, if necessary.

The piece forming the flat top should be fitted in with the lids attached, and the three-pieces should be carefully tested in place to ensure they lie flat on the sides. The top is screwed from the outside as well as being glued inside. The outer end of each lid is rounded off as shown by the section on that part, and a little round knob is fitted in the position given.

The other end is taken up by two fancy hinges (No. 5308), and in order to get that part to lie nicely against the edge of the top, a slight chamfer must be made on the top itself.

Take a little care to see all these parts of the top and lid fit nicely, particularly in hinging the lids themselves. They must, of course, be in line with the edge of the top so that the three pieces (shown to outline only in Fig. 2) will fit evenly between the sides when finally fixed. It is advisable also to run a small fillet along the inside of the sides to make a rest for the lids. The position of this is also indicated by dotted lines on the sides themselves. A further short fillet rests beneath the top to strengthen that piece also. A handle cut from ⅜in. wood is glued centrally along the top, and can be also screwed up from beneath if preferred.

The Round Mirrors

The long sides, it will be noted, are decorated with two mirrors, and these are let into the circular opening which has been cut. They are held there by a simple rim of ⅛in. wood which projects a little beyond the circle in the side. Glue it in place, and then put the mirror behind, filling out the rest of the wood with cardboard or blotting paper.

The inside of the workbox is lined—as has been mentioned—with suitable coloured cloth or similar material, and by gluing this over the whole of the sides, the mirror and the backing stuff are held in place.

Cut the cloth carefully and correctly to get good joins in the corners. It is a good plan to get a piece of waste paper first, marking and cutting it out to obtain the correct pattern, then this can be laid on the actual cloth and the material cut with a sharp knife against a steel ruler.

If the work is to be polished this must be undertaken before the linen is fixed.

Two small floor rails have also to be added beneath the two ends, and they are glued up under the floor so the bottom edge comes in line with the edge of the long sides. These parts may have to be trued off to secure this, but it is essential if the whole of the work is to stand square on the table.

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A parcel of wood, design (No. 1825) and all materials for building this splendid Ukulele. When made up it should be worth at least half a guinea. Instruction book "How to play," 1/- extra.

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PORTRAIT PANELS CUT IN WOOD

PORTRAITS of the family, friends and relatives inlaid in wood veneers, so that they are true to life and easily recognised, sounds like a rather advanced hobby for the average amateur, but, by following the instructions given in this article, these can be made quite easily.

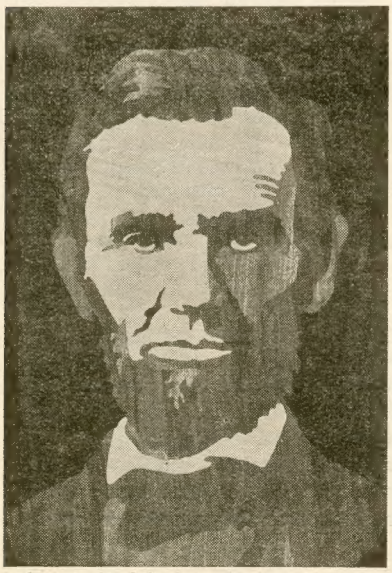
The materials required are as mentioned:—A selection of 1/20in. veneers, comprising walnut, maple, satin-walnut, chestnut, ash or similar open grained wood, and any others that are easily obtained from stores dealing in veneers. A few pieces of 3-ply or 5-ply wood at least $\frac{5}{8}$in. thick, to use as a backing for gluing on the finished veneer picture.

Also a few pounds of joiner's or veneer glue. (Do not attempt to use anything else as some cold glues are apt to stain the light woods and spoil what otherwise might be a good portrait.) Finally, a roll of gummed paper, such as used in shops for fastening up small parcels instead of string. The use of this will be explained as we proceed.

The tools are few and not expensive. They comprise those found in every kit, with a fretwork saw—one with at least a 20in. bow, a dozen fretwork saws size O, Silver Label. A fretwork drill, with a bit of such size to fit the fretsaw, and a knitting needle sharpened to a needle point, to use in picking up and placing the smaller pieces of veneer are also required.

A wonderful picture 12ins. by 14ins. William Shakespeare cut from black and white ebony, walnut, satin-walnut and maple.

A portrait of the late Woodrow Wilson.



A portrait of the late Abraham Lincoln.

Now to proceed with the actual work. First select from among your snaps a clear untouched picture, preferably an inch square or larger in size (the larger of course being easier to enlarge), and be sure that the snap is strong and clear.

THE reader who forwarded pictures and details of this hobby lives in a small prairie town in Canada, but his spare time is being increasingly taken up, he says, in the demand for these life-like pictures. The picture of Abraham Lincoln was enlarged from a small picture in a history book.

To enlarge to the size required for the wood inlay, the writer uses an ordinary magic lantern, equipped with two 100 watt bulbs, and set up as shown in Fig. 1. There are a number of lanterns in every town, and it should be easy to borrow one long enough for use. The enlargement must be made at night, and the method used by the writer is to set up the glass screen at the end of the bench or table, fasten a piece of tracing paper to the glass, on the side away from the lantern, with small squares of the gummed paper.

The portrait is then placed upside down in the opening at back of lantern, with a dark cloth or book against it to shut out all light. The lantern is then switched on, and with all the other lights out, the image appears on the glass screen. Focus the lantern by sliding the lens in and out, and sliding the lantern back and forth, until the image is of the size required, and at its clearest.

Then sit down at the glass screen and trace the portrait with a sharp pencil, leaving the light masses clear and etching the tones as they appear, as a guide for later selection of colours.

We now have the enlargement on tracing paper, and if only one picture will be required, this original can be pasted directly on wood veneer, but if it is desired to save this enlargement for future use, a number of carbon copies can be made.

Now comes the selection of the veneer. The writer's method is to paste the enlargement on to a

piece of the lightest wood, using the darker tones down to the bottom layer, which is the dark walnut or ebony. The bottom layer will be larger than the others, as it forms a background. The size of the finished picture in this case is about 12ins. by 14ins.

It is possible to make two perfect pictures at one operation by having two layers of the darkest wood together at the bottom, two layers of the lightest wood at the top, and four intermediate tones in between, and after a little practice the intermediate tones can be patched together, using odds and ends of veneer and sticking them together at the edges with the gummed paper.

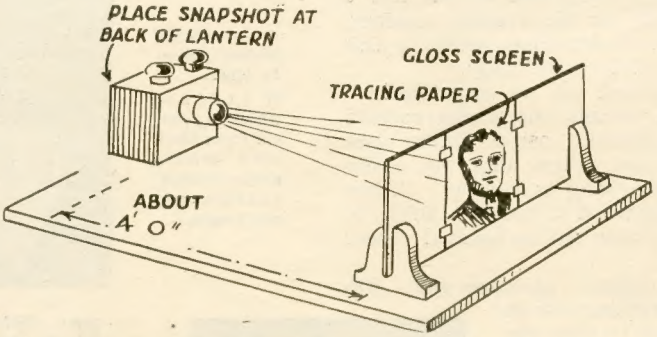


Fig. 1—How the enlarging is done from a small picture as explained.

The selection of veneers is important, and after making a selection, it is best to rub a cloth slightly dampened with linseed oil over the face of each veneer, which brings out the grain (be careful not to put on too much oil as it will cause blisters in the finished picture if used more than very lightly). Then, by holding the veneers up in about the position the picture will occupy, the top or bottom of the veneer can be determined and marked.

The veneers are laid on a flat board, one over the other with the dark ones beneath, and pinned together with ordinary household pins, about 6 or 8 being required. Drive the pins carefully through the veneers until about ¼in. of pin sticks through, snip the pins off ¼in. above the top layer and bend over, turn the block of veneers over and bend the other end of pins over the same way, giving a light tap to each one to make a solid block, ready for cutting. Be careful that pins are not driven in any part of the light veneers, which will be used in the finished picture, as these pinholes cannot be hidden afterwards.

A portrait in wood, showing the small original print from which it was taken.

Now for the cutting. Take your small drill, and drill a hole through at the outline, say somewhere near the bottom. Drill hole with a slight slant, for undercutting, as the entire outline is cut under at the bottom, so the pattern will fit tightly when pressed down in place afterwards. Before starting your actual cutting, make a cutting table 8ins. wide and about 16ins. long. Bore a ⅜in. hole 4ins. from the end, and run two saw cuts from the end of the board to this hole, making a slot 3/16in. or so wide.

Fasten this board to the bench with two screws so there is about 6ins. clearance from the hole to the edge of bench.

Then fasten a cardboard box the size of a shirt box, to the side of bench, about 12ins. below cutting table, to catch the pieces which accidentally drop. Another similar box laid on the bench will be used to hold the pieces as they are taken out from cutting. Lay within reach your saws, a piece of candle to use for greasing saw, and the original snapshot for reference, and proceed to cut out the picture, starting at the bottom and cutting out section by section.

Be very careful to bevel the saw cut in at the bottom, where the white pieces will be used, and out at the bottom where the dark ones are required, for by so doing the pieces will fit tightly when in place at completion and show no joints whatever.

The picture is now cut out and all ready for putting together. This is the most interesting part. Take your roll of gummed paper and cut a quantity of pieces of various sizes ⅜in. to ¾in. square and some strips. Place these handy in a small cardboard box.

Lay a piece of beaver board flat on the bench in a good light and lay the walnut background veneers side by side on the beaver board, holding them in place with thumb tacks pressed down at their outside edges. With the snapshot in front for reference, place the veneer cuttings, piece by piece, sticking them as you proceed with the small pieces of gummed paper.

When this stage has been completed, the face of the picture will be covered with paper patches, and the picture can be easily handled. Now take this sheet, turn it over and stand it up in about the light it will occupy. Stand back about 10ft. and see if any pieces need changing.

Here are particulars of the wood used in the portraits illustrated with the first article. The picture of Lincoln measured 14ins. by 16ins. enlarged from 2ins. by 3ins. The background was in black walnut with light walnut, maple and chestnut for the figure. That of Shakespeare was with black and white ebony background in walnut, satin-walnut and maple giving the picture an antique appearance. The portrait of Wilson was

Portraits in Wood—(*continued*)

cut in light walnut, satin-walnut and maple, on a dark walnut ground.

If ebony is unprocurable, for the background, a lighter wood can easily be stained jet black with the Hobbies ebony stain.

If everything is satisfactory, your portrait is ready for gluing. Take a piece of plywood, of a size a little larger than the picture, sandpaper clean, and lay the wood picture in place on it. Hold the same with three strips of gummed paper, fasten down the left side of veneer and plywood, so the veneer hinges like a book cover. It is then ready for gluing.

Using Glue

For this work, considerable pressure is required, and if it is decided that the hobby is worth cultivating, a glue press can easily be made, but the present picture can be tried between two pieces of timber, a little larger than the picture, with faces rubbed over with the wax candle to prevent glue from sticking.

Be sure the glue is hot, and if the pieces of timber are warmed, the job will turn out much better. At least six hand screws or cramps will be required to use for pressure. Lay one of the timbers up on bearers, so the hand screws can be inserted. Lay your picture in place, then a sheet of paper, next your other timber and adjust your hand screws ready.

Everything is now in readiness for the gluing. Open the veneer on the plywood, like an open book, apply a liberal coating of glue to both plywood and veneer, place between timbers as before, and apply handscrews as quickly as possible, giving plenty of pressure from the centre outwards, and leave in pressure overnight. Leave the veneered job to settle for two or three days and then scrape off gummed paper, and bring to a surface with a cabinet scraper and fine glasspaper.

Give a thin rubbing of linseed oil, and then a coat of natural wood filler, well rubbed in, and surplus all rubbed off. Leave for 24 hours, and a coat of wax completes the job.

No Frame

Do not attempt to frame these pictures, but simply bevel edges slightly and paint black. This hobby can be developed to a great number of uses by the professional mechanic, such as pictorial inlays in slab doors, panelling, bookcase ends, etc., and will be found to be very fascinating.

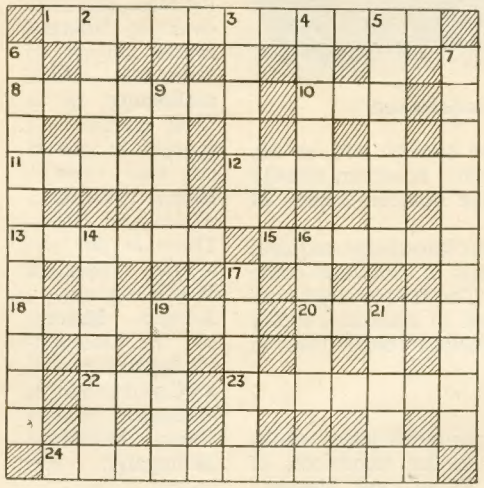
The cutting of portraits in wood was explained in our issue last week, and the work had been completed up to the point of gluing. Now we can continue to finish the pictures off entirely.

No. 6 CROSSWORD PUZZLE

HERE is another simple Crossword Puzzle which now runs regularly, with a prize worth winning. Competitors will find Hobbies Handbook and these pages useful in solving the clues, as the puzzles are specially worked out for handymen and craftsmen. This is Competition No. 6 and a Gem Fretmachine worth 25/- is the prize awarded to the correct, neatest solution, and most novel, sent in before February 23rd, 1935. Overseas readers whose entry cannot arrive by the date mentioned, can send theirs in by June 29th, 1935, and a special prize value 20/- will be awarded.

All must be addressed to Crossword Competition No. 6, Hobbies Weekly, Dereham, Norfolk. The names of winners will be announced later in these pages and the prize sent carriage paid. Entries must be written in ink in an envelope sealed down (bearing 1½d. stamp). Give your full name and address and write distinctly. No reader can win more than one machine. If more than one correct solution is sent in the prizes will be awarded the most novel and neatest.

A GEM FRETMACHINE AS PRIZE

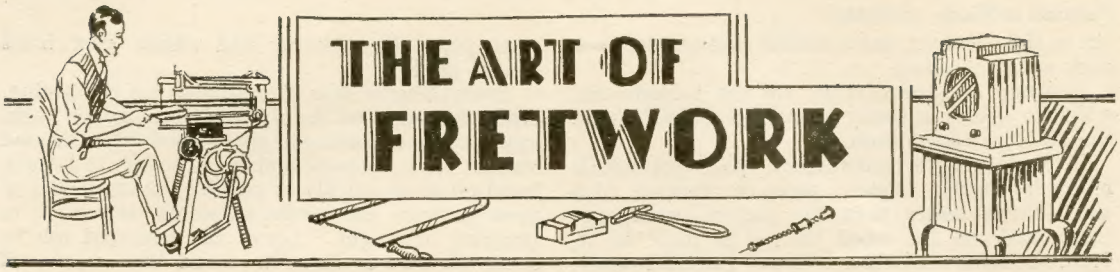


CLUES ACROSS

1 *Tools for rounding surfaces.*
8 *Used for marking angles.*
10 *Possessive pronoun.*
11 *Overturn.*
12 *Everlasting.*
13 *Chicken's call.*
15 *"Stifle" (Anagram).*
18 *Give glossy finishes.*
20 *You can make this from Hobbies Handbook.*
22 *Your joints should do this properly.*
23 *Gay.*
24 *Small part of the A1 machine.*

CLUES DOWN

2 *For filling holes.*
3 *Parts of windows.*
4 *Active.*
5 *Chief quality of a substance.*
6 *Ornamental plates for keyholes.*
7 *Used for blocking corners in cabinet work.*
9 *South African animal often called Honey-Badger.*
14 *To bevel.*
16 *Ages.*
17 *Like the goods Hobbies sell.*
19 *Postage on our products is this.*
21 *Tool for boring holes.*

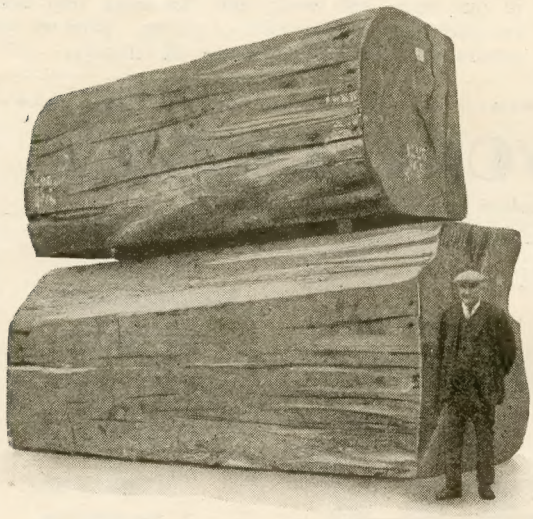


FIFTH ARTICLE

Wood and all about it—The Varieties to Use—Kinds of Oak—Chestnut as a Substitute—Thickness and Grain—Suitable Jobs and Wood

HAVING dealt with the principal tools we must now turn for a little to that all-important material—the wood. There is much to learn on the subject and this knowledge can easily be gained by actual experience. One cannot know too much, and the subject is intensely interesting because of the almost never ending varieties which are to be found.

The beginner first learns about wood at the Manual Centre when he is at school and gets an elementary knowledge which will be of much assistance. In later life he follows up his knowledge by a choice of furniture for his home and learns to appreciate the difference of good and bad quality, plain and handsome timber and so on.



Logs of mahogany at Hobbies mill.

This knowledge in general life, however, usually deals with carpentry and the heavier brands of wood generally used.

In this respect, however, our knowledge requires to be extended, for the needs of fretwork come under a different category. The timber used is of different quality, more varied in its range, whilst it is usually used in much thinner boards than in carpentry.

Know the Kinds

A descriptive list of the many varieties which can be used will be found in the handbook of Hobbies "Fretworking in Wood and Metals" which the beginner should certainly read. Many of these, of course, are seldom required, and the cost is often too high to make them popular. There are, however, about half a dozen which are always in demand and the keen worker will be at pains to make himself conversant with their style, character, grain, etc.

A good plan is to get the sample pieces of wood which are offered for a few pence by Hobbies Ltd., and to know at a glance what they are.

The Chief Varieties

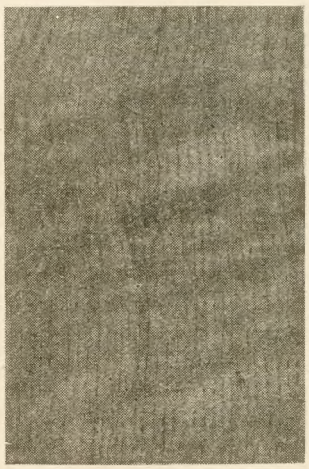
Another method of acquiring knowledge, is to study the furniture stores and to make enquiries as to the various kinds used in tables, cabinets, etc.

The principle woods used in fretwork, are oak, satin walnut, mahogany, sycamore, whilst the more fancy kinds in demand are padouk, satinwood, and walnut.

It must be remembered that no two trees are exactly alike, and in consequence, the grain of no two boards are the same. They may be of the same class, but again there is a variety which can only be learned by constant experience.

300 Kinds of Oak

Again, one must remember that even in each kind there are different classes. In oak, for instance, there are over 300 different kinds known to botanists, whilst mahogany, of a total different species, is grown in the West Indies, Honduras, Africa and India. There is, for example, Spanish Mahogany, Borneo Mahogany, St. Domingo Mahogany, as well as Colombian, Panama, East India, Mountain Mahogany, and so on.



A typical piece of nicely figured oak.

In oak, too,

there is the variety which has a nicely figured surface, or the kind which has the wide open grain so well known in furniture. Oak, of course, is essentially English, but there is also American, Austrian, African, Russian and Polish, which are often used.

In this respect, it is worth noting that although belonging to a different family, Spanish Chestnut is frequently very much like oak in looks. The material is much softer in texture, but also much cheaper, and is, therefore, often substituted, and may be passed off as oak to the uninitiated.

Specimens of leaves from which to identify the trees. They are sycamore, beech, oak and mahogany.

This amazing variety must be remembered because it plays a big part when one is selecting boards to match up for a job. For instance, double doors to a cabinet can be ugly if made from two totally different kinds of mahogany or oak, although of the same family.

Choose your wood when you know the design, and get the boards as evenly grained and as much alike in texture and colouring as possible.

Varieties to Know

A full description of these timbers cannot be given here, but useful and interesting descriptions of colouring, grain, etc., have been dealt with in some articles in various issues of Hobbies Weekly, which are still obtainable at 2d. a copy, plus postage.

Most workers know the wood used varies in thickness from 1/16in. up to ⅜in. and, very occasionally, ½in. The 1/16in. is used mainly in inlay work or as ornamental overlays. The ⅛in., 3/16in. and ¼in. are in general use, although it must be remembered that the thicker wood looks very heavy if it has a number of frets cut in a small piece. The ⅛in. stuff is used in large work and where there is strength required. It should not be fretted a great deal.

Both ⅜in. and ½in. boards are mainly used in furniture work, such as large cabinet tables, footstools, etc., and of course, it takes more cutting in proportion. They should not be used more than possible in ordinary small work.

Already Planed

All boards are now obtainable ready planed, and those offered by Hobbies Ltd., have a beautiful glossy surface which needs no further treatment. The 1/16in. boards are occasionally planed on one side only, but, being used for ornamental work—both sides are never used, and it does not matter in consequence.

HOBBIES of WELL-KNOWN PEOPLE

Interesting and Intimate details of Gordon Richards—Jockey

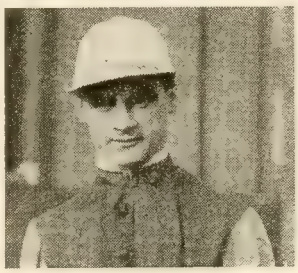
MEET Gordon Richards as the private family man in the street or bathing at Shoreham-by-Sea in Sussex, and no one who did not know, would imagine that every year millions of pounds depends upon his horsemanship. He is such a little fellow, but his exploits on the Turf have induced thousands of betting people to follow him blindly simply because they know he is straight and that they will always get a run for their money.

Off the racecourse, Richards is the Ideal Family Man. He has a wife and two boys whom he adores. Bungalow owners at Shoreham speak with pride of having let one of their commodius residences to "Mr. Richards—the Champion Jockey, you know!"—just as if one didn't. And here, during the summer months, Gordon and his family enjoy themselves bathing, fishing and playing sand cricket. After the flat-racing is over they go to Switzerland for the Winter Sports, and I am told that Gordon is just as efficient with the skis as he is with the stirrups.

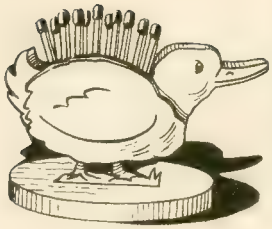
Life at Marlborough, where the family make their home, is of the homely kind. Mrs. Richards plays the piano and Gordon sings like every other good Celt. He is fond of motoring, but not for speed—this he leaves behind him when he quits the Turf every day—and he keeps pigeons.

Oh yes, he is keenly interested in the fortunes of Wolverhampton Wanderers. If he ever has a shilling on football, I am sure he always gives the Wolves to win!

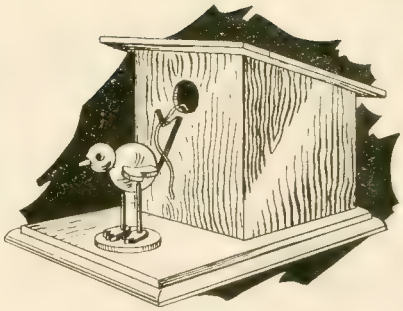
G.G.



Look out for further People in this popular feature!



A STRING and MATCH HOLDER



These two quaint novelties are easily cut with a fretsaw from a few odd pieces of wood. If necessary, a complete parcel (No. T.M. 277) of all parts, with rod, hinges, knobs, etc. is sold for 1/6.

HERE are two little novelties that can be made up from some odd pieces of thin wood and painted up artistically. The larger is a string box made from 3/16in. wood and cut out entirely with the fretsaw. The base is made up of two pieces, the lower piece being 7¼ins. by 4¾ins. and having the edges rounded off, while the upper piece is 6¾ins. by 4¼ins. with its edges kept square. The pieces are glued together and put under weights until dry.

The Sides and Roof

To this base is screwed and glued the little bird-box, the measurements for which are shown in Fig. 1. The front is 5ins. by 3¾ins. and the back 3¼ins. by 3¾ins. Between these pieces are glued and nailed the sides which are cut tapering, the front edge meeting or butting against the front and the back edge (being 3¼ins. long) meets the back. The top edges are rubbed down with glasspaper so the roof or lid lies flat.

A hole ½in. diameter is cut in the front for the string, which, when pulled through to the length required is rubbed in the " V " of the bird's tail.

In a slot in this tail is fixed a safety razor blade which easily cuts the string. The lid is formed to open by being cut across as shown in Fig. 2. The size of the lid piece is 4⅝ins. by 4¼ins. The two pieces will be laid flat on a bench or table and fancy hinges (No. 5308) fixed by means of pins or screws. The narrow strip is then glued and screwed to the top edge of the front. Fig. 2 shows the positions of the hinges.

The bird is made from the parts shown in Fig. 4. Two of Hobbies ball feet—(Nos. 22 and 15) are used for the body and head respectively, and pieces of 3/16in. rod for the legs. The feet are cut to the shapes shown and glued to the legs, which should pass through these pieces into the circular disc or stand. This, in turn, is glued to the base.

The Body Part

The ball forming the body of the bird should be

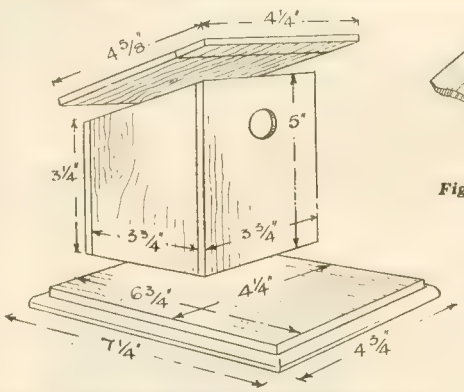


Fig. 1—The general construction of the framework.

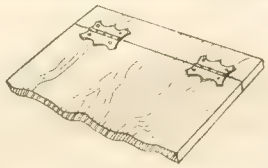


Fig. 2—How the lid is hinged on.

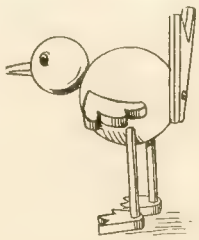


Fig. 3—The bird and tail string cutter.

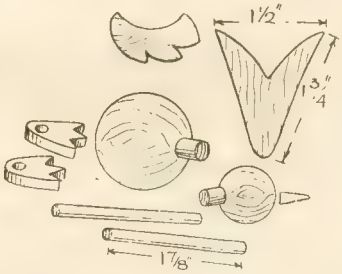


Fig. 4—The parts required for the bird.

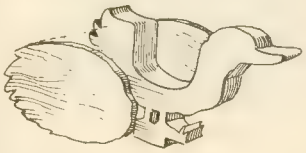


Fig. 5—How the match-holder is formed.

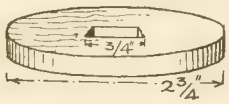


Fig. 7—The base and hole.

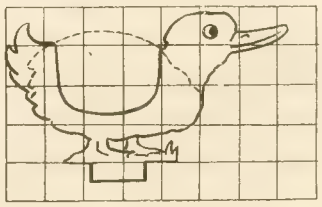


Fig. 6—The shape to draw on to the wood.

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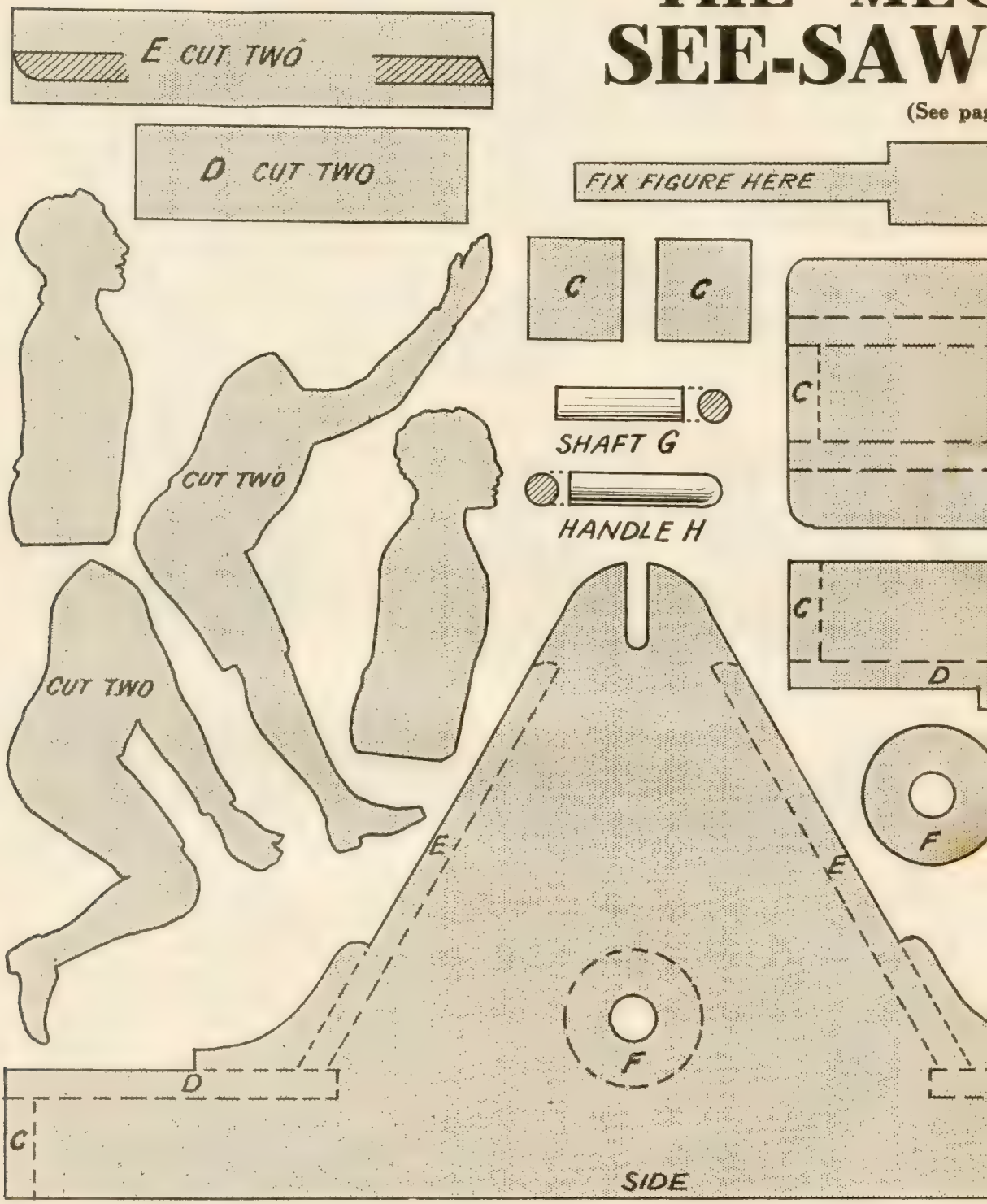

CHANICAL MODEL

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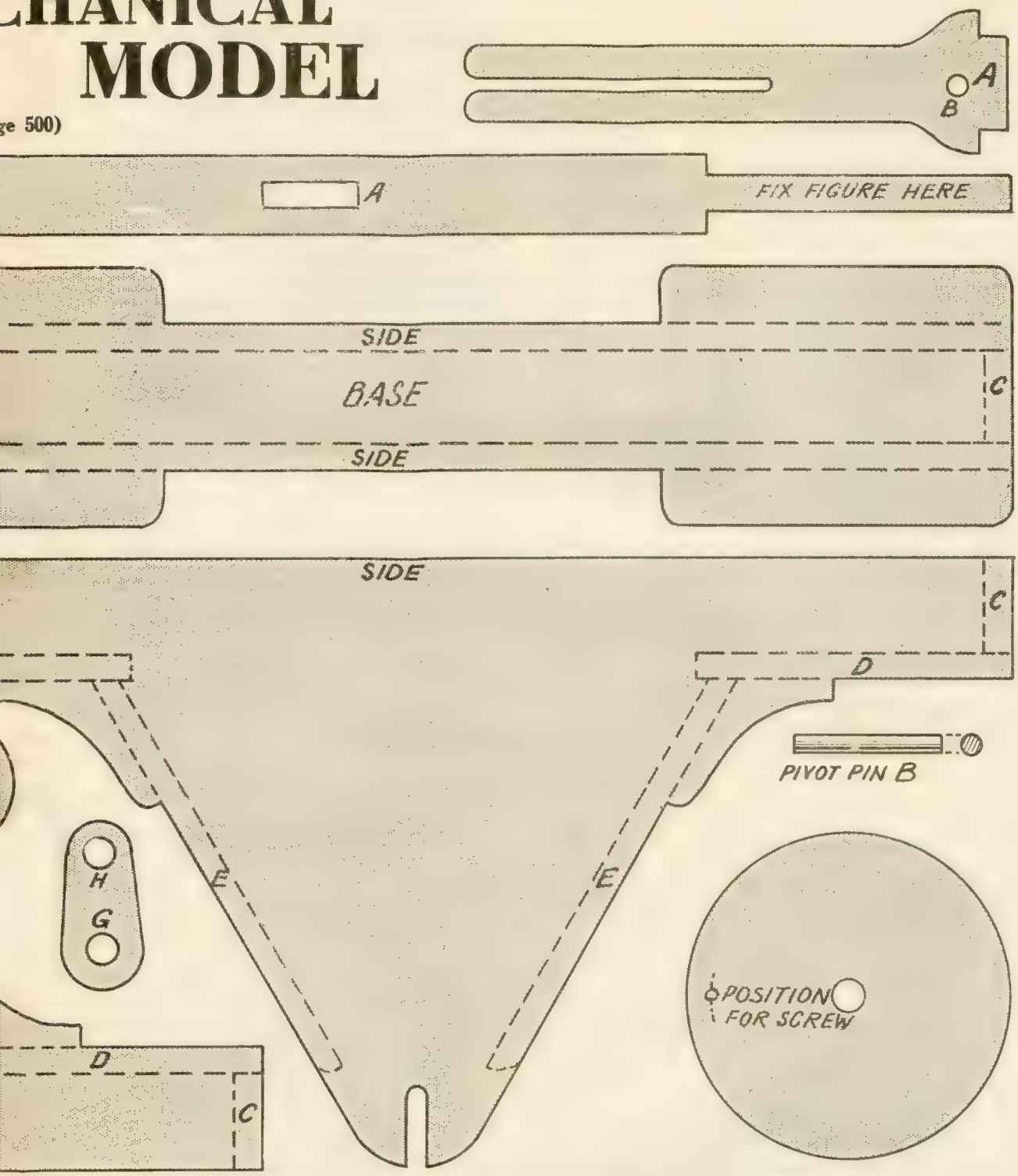

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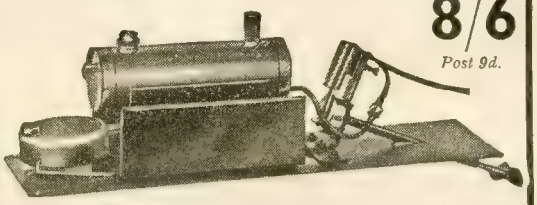

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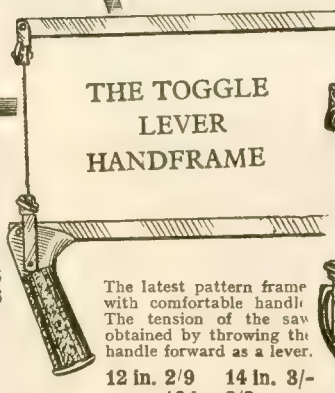
The finest handframes for fretwork in the world are made by Hobbies Ltd., and they are used all over the world. They have special saw grips which are unequalled and are made of material which will last a lifetime. You have only to compare them with any others and you will see their superiority immediately.

Always ask for Hobbies to get the best

THE LEVER HANDFRAME

The most popular frame in the world. The top lever is a special feature, making it easy to get the right saw tension. The handle provides for the use of shortened sawblades.

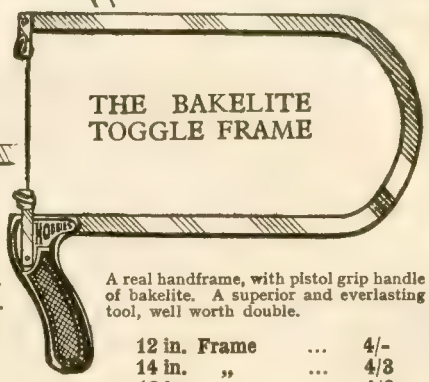
12 in. - 3/9 16 in. - 4/8
14 in. - 4/- 18 in. - 4/6



THE TOGGLE LEVER HANDFRAME

The latest pattern frame with comfortable handle. The tension of the saw obtained by throwing the handle forward as a lever.

12 in. 2/9 14 in. 3/-
16 in. 3/3



THE BAKELITE TOGGLE FRAME

A real handframe, with pistol grip handle of bakelite. A superior and everlasting tool, well worth double.

12 in. Frame	...	**4/-**
14 in. „	...	**4/3**
16 in. „	...	**4/6**

Made only from the best material and guaranteed good

HOBBIES

Buy from any Hobbies Branch or Agent or by Post (6d. extra) from Hobbies Limited, Dereham, Norfolk.

String and Match-Holder—(*continued from page* 490)

flattened slightly at the rear so the tail (shown in Fig. 4) may have a good hold with glue and screws. The projecting pin on the large ball should be cut off and a hole made in its place for the pin on the smaller ball forming the head.

The beak is formed from a small piece of odd wood painted and glued on. The wings also are of odd 3/16in. wood cut to the outline given in Fig. 4 and glued on.

Some bright poster paint or enamel laid on after all the parts have been cleaned up will make this little box into an attractive and useful ornament. If desired, after the ball of string has been put into the box and the end brought out through the hole in the front, a couple of screws may be put through the lid to hold it secure.

Our second novelty consists of a useful match-holder, and from the diagrams given it should be very simple to make up. The holder itself consists of three pieces—the centre body piece being of ½in. wood and the side wing pieces being ⅛in. thick.

The diagram (Fig. 5) shows how the pieces are arranged after cutting out, the ½in. squared outline Fig. 6 giving the necessary guide for enlarging on to the wood. Complete the outline, following the squares carefully and put in also those parts of the dotted lines which show across the body and tail of the bird. Make a tracing of the wing portion, shown detached in Fig. 5 and transfer the outline of this to a piece of ⅛in. wood. Pin another piece of ⅛in. stuff to the back of this and fretcut the two together.

Draw the outline of the body part on to a piece of ½in. wood and cut round with a coarse saw afterwards cleaning up the edges and the hollow body part with glasspaper. The three parts are finally glued together, and the tenon on the middle section fitted into a slot or mortise cut in the circular stand shown at Fig. 7. The base is cut from 3/16in. wood.

Bright colours again should be used for this matchstand—green for the base, yellow for the legs and beak of the bird, and white or cream for the feathered part. A parcel of wood and the necessary wooden balls and dowelling is provided for the two articles dealt with. This is Parcel No. T.M.277 and may be had for 1/9, sent post free from Hobbies Ltd., Dereham, Norfolk.

MATERIALS REQUIRED

Satin Walnut

1 piece 8ins. by 5ins. by 3/16in. Base.
1 piece 7ins. by 5ins. by 3/16in. Base.
3 pieces 5ins. by 4ins. by 3/16in.
3 pieces 3½ins. by 4ins. by 3/16in.
1 piece 5ins. by 4½ins. by 3/16in.
1 piece 3ins. by 2ins. by 3/16in.
1 piece 5ins. by 2ins. by ⅛in.
1 piece 4ins. by 3ins. by ½in.
1 piece 3ins. by 3ins. by 3/16in.
1 Wooden Ball 1½ins. diameter (No. 22).
1 Wooden Ball ¾in. diameter (No. 15).
1 piece 3/16in. dowelling 4ins. long.
1 Pair ¾in. Fancy Hinges, No. 5308.

The Home Telephone

If the home telephone described in a recent article (in our issue of Sept. 8th) is fitted with a transformer or induction coil, the speech can be considerably improved. This addition is essential if communication has to be established over a distance greater than 200 yards, but good results have been obtained with this set over a distance of nearly half a mile.

Obtain a bundle of soft iron wires to make a core 3ins. long and ⅜in. diameter. Bind them together with one layer of insulation tape. The ends of the coil are 1½ins. square and are cut from ⅜in. dry plywood, they must fit tightly on the core leaving about 1/16in. projecting at each end. Wind the core with four layers of No. 24 D.C.C. wire and then wind with a few turns of dry brown paper. Observe the usual precautions when winding the wire, drill small holes in the end pieces and pass the wires through, marking this end "primary."

The secondary consists of 14 layers of No. 38 D.C.C. wire, starting from the opposite end to the primary and putting a layer of paper between each piece of wire, as in Fig. 1.

When using an induction coil the circuit has to be changed slightly, and connections are made as in Fig. 2. In this case a good earth plate can be used instead of the return wire, i.e., only the line wire is used.

Instead of the simple panel push, a two-way switch must be fitted which has the contacts labelled "call" and "receive." Normally the arm is left on the "receive" contact. Two contacts, instead of one, are fixed to the top of the supporting bracket and both make contact with the arm when the telephone is removed, the construction is exactly the same as before, but the bracket can be made of ¾in. wood to facilitate the work.

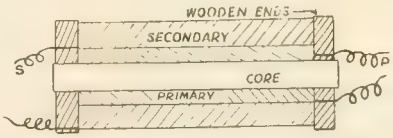


Fig. 1—A section through the coil.

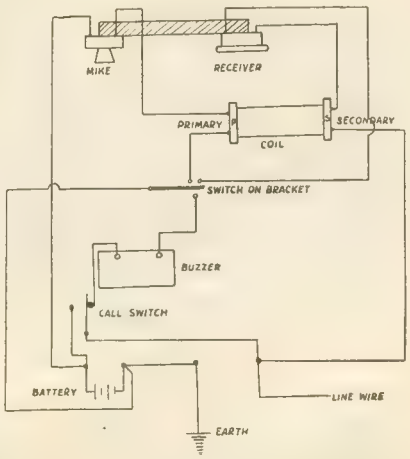


Fig 2—The circuit incorporating an induction coil.

Not a Cheap Dinner !

YOU are driving through the country at an exhilarating 60 m.p.h. and a chicken, sauntering placidly across the King's Highway, comes into contact with your front wheel.

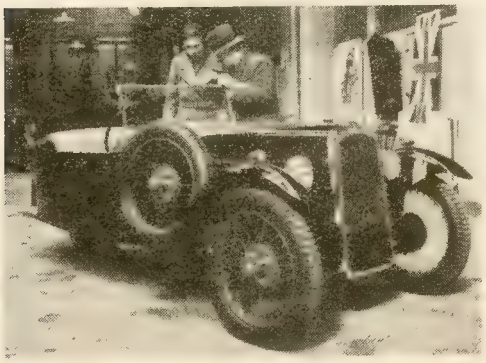
You pull up within a hundred yards and retrace your course to examine the body. Is it permissable to take it home to mother Definitely NO !

The owner of the fowl cannot run you in for running into his charge, but, however worthless it may now be, he can have you arrested for theft should you take it away !

Three-Wheelers

WHEN baby cars arrived, it was said that three-wheelers would soon disappear off the roads. Contrary to this, however, there are now more three-wheelers about than ever, thus proving that there must be something about them that is attractively different.

While the original design of the three wheeler was for "motoring at motor cycle cost," there are now many models that are almost expensive to run as a light car. Their performance, nevertheless, is as good as cars costing three or four times the price.



The Popular B.S.A. three-wheeler.

So the motor cyclist who, for matrimonial reasons or otherwise, has to turn his attention car-wise, the super-sports three-wheeler will enable him to still keep in the run with Nortons and Bentleys.

The model that has, the greatest claim to "motoring at motor cycle cost" is the new J.M.B. three-wheelers, manufactured at Ringwood, Hants. The simplest way of discribing this car is to say that it has the performance of an Austin Seven with the cost of a 500 c.c. sidecar outfit. An ex-motor cyclist running a J.M.B. will certainly not look longingly at his past loves, or his engine—a 500 c.c. s.v. J.A.P.—is exactly the same as was fitted to his motor cycle. And the lines of the J.M.B. do not suggest "cheap motoring."

Perhaps the most thrilling three-wheeler to drive is the Front-Wheel - Drive Sports Four Cylinder B.S.A. From a stand-still it will reach 50 m.p.h. in just over sixteen seconds, this, of course, being possible because of the 9 h.p. engine in the light body.

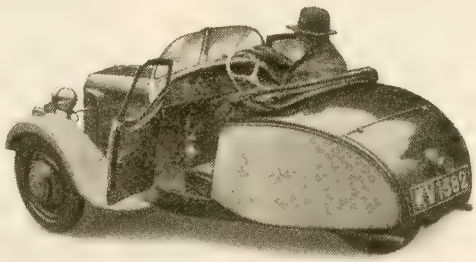
As can be seen from the illustration, the car is certainly a good looker. The front wheel drive idea is an exceptionally good one for three wheelers, as wheelspin is practically eliminated. B.S.A's. also manufacture twin-cylinder three-wheelers which are well known

The famous Aero Morgan needs no introduction. The low lines and distinctive exhaust note are recognized by all. A model that has recently been introduced, and which will probably be as popular as the Aero, is the four-cylinder Morgan.

The engine is the same as is fitted to the famous Ford "eight" car, and this engine, which is decidedly 'peppy' in the ordinary Ford saloon car, gives a really remarkable performance.

Other British three-wheelers include the Coventry Victor, with a flat-twin engine, the Raleigh, with the single wheel in the front, and the Progress Three-Wheeler, manufactured in Manchester.

Readers who are still under age for driving a car, but are eligible to drive a motor cycle, can get a licence for a three-wheeler provided it does not weigh over 8 cwt. All £4 tax per year models are within this limit.



The Coventry Victor Luxury Model.

Upper-Cylinder Lubricants

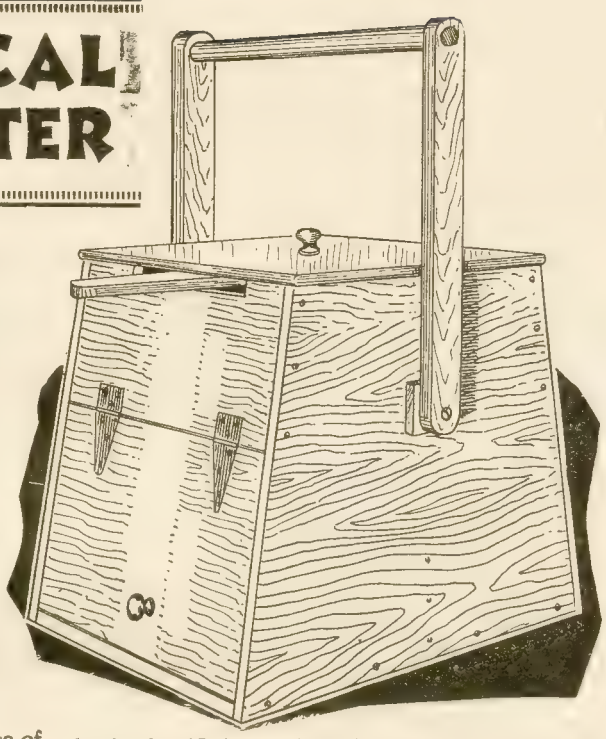
ONLY recently have we heard of upper-cylinder lubricants. Consequently, many wonder if there is anything to be gained by their use.

For running in a new machine this extra lubricant is well worth the slight additional cost, while with older engines tuned to give their maximum efficiency, smoother running can be obtained, as well as more power. With this method of lubrication the oil is mixed with the petrol, thereby enabling it to reach the most important parts of the engine, the piston and cylinder.

Some readers may be tempted to add ordinary engine oil to the petrol instead of the special preparation. This will do more harm than good, for the oil will burn quickly and make excessive carbon in the engine as well as making gummy valves. The special oil has a far higher flash-point (i.e., it only burns at a very high temperature), therefore it performs its duty whatever the engine temperature. A pennyworth is sufficient for two gallons of petrol.

A MECHANICAL CINDER SIFTER

A novel and useful piece of light carpentry to undertake. Any housewife will be delighted at having such an ingenious article to use.



A MOST useful domestic article to make for the home, it sifts the ashes without mess or dust. The drawing, Fig. 1, shows the general construction of the box, which is quite simple and easily made.

An ordinary garden sieve is housed inside, at the top, into which the ashes are emptied. When the sieve is shaken the ashes drop into the left half of the box, then the hinged part of the division piece is pulled over and the cinders emptied into the right half of the box.

The Handle Holder

Fig. 2 shows one of the side pieces, cut from ¼in. threeply. On the inside of each piece draw two pencil lines ½in. apart, to show where the fixed portion of the division comes. At the spot indicated, glue a square piece of wood for the handle to be screwed to.

The front and back pieces, Fig. 3, are cut in two parts as shown, and hinged together with 4in. strap hinges. They are cut from white deal, planed to a thickness of ½in.; the same material also being used for the remainder of the box. The recess, cut out at the top is about ⅝in. deep.

The Floor

The bottom is a plain rectangle, cut to the size given in Fig. 7. The sides can now be glued and screwed to the upper parts of the front and back, and then the bottom (also glued and screwed) fixed between. Use thick hot glue and 1in. round-headed brass screws. The top edge of the front and back should be slightly bevelled to bring them level with the side pieces.

The division, Fig. 4, is composed of two parts and hinged together. Note the meeting edges where hinged are bevelled and the top edge rounded. Push down between the sides and take care that the lower part comes between the pencilled lines already marked. Then screw through the sides securely.

The Sides

You must drill the holes for the screws in the centre of the pencil lines, otherwise the screws may go astray. This is best done before the sides are fixed. Glasspaper the edges of the hinged part so that it does not stick.

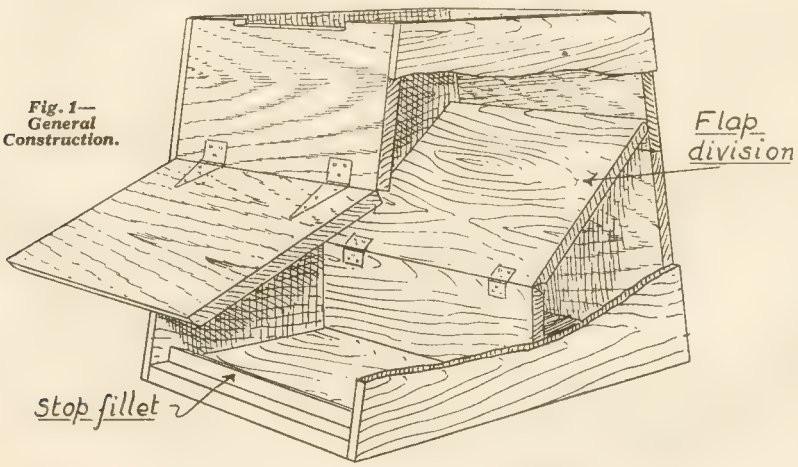


Fig. 1—General Construction.

CUTTING LIST

	Threeply.—
Sides	*18ins. by 15ins. Two pieces.*
Lid	*14ins. by 13½ins. One piece.*
	Deal. ½in. thick.—
Fronts	*12½ins. by 6ins. Two pieces.*
	12½ins. by 8½ins. Two pieces.
Bottom	*12½ins. by 9ins. Two pieces (glued together).*
Division	*12½ins. by 9ins. One piece.*
	12½ins. by 4ins. One piece.
Handle	*15ins. by 1½ins. Two pieces.*
Stick	*15ins. by 1in. One piece. Round wooden rod.*

Triangular fillet, 25ins.
Wooden knobs (3).
2 pairs 4in. strap hinges and 1 pair 2in. steel butts.

A Cinder Sifter—*(continued)*

The side pieces of the handle are shown at Fig. 6. Bore the 1in. hole near the top end (not too near), and a small screw hole near the bottom. Fix to the centre of the glued-on squares, then join both together at the top by means of a length of broomstick glued in the holes. The handle should be movable, so the screws must not be driven in too tightly.

A Door Stop

A small stop fillet should be glued along the bottom of the box, to come just behind the flap door. This is shown in Fig. 6. The fillets are triangular slips of wood and serve two purposes. They provide a stop for the doors and also help to prevent the ashes and cinders from falling too far forward.

The lid is just a plain square of threeply, cut to cover the top of the box. To keep the lid in place, glue a triangular piece of wood at each corner underneath (see Fig. 8). Now fit a knob to the lid and one to each of the flap doors.

The Sieve

The sieve is one of the ordinary cinder sifting kind to be purchased at any hardware stores. The box will accommodate a 12in. one, a nice convenient size. Two pieces of wood are cut to the shape shown in Fig. 5, and glued and screwed to the sides of the sieve. The long one is for shaking the sieve; the short one to support it the opposite side. Both rest in the recesses cut in the front and back of the box.

As the box is for domestic use, it can be left plain, but a coat or two of varnish or paint is certainly advisable. It preserves the wood and adds to the appearance of the finished article.

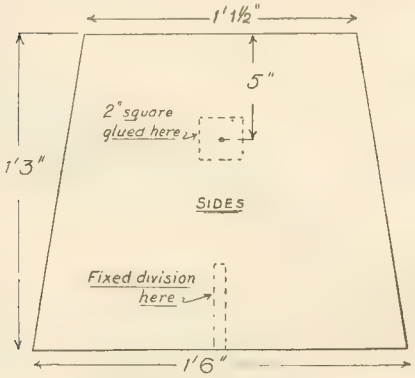


Fig. 2—One of the sides.

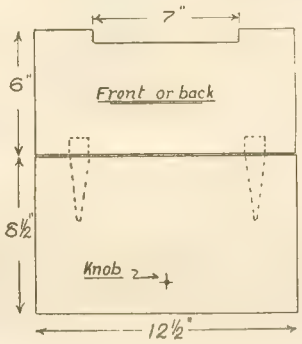


Fig. 3—The front or back.

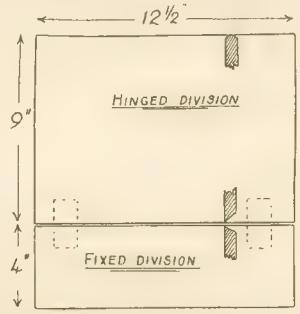


Fig. 4—The two-part division piece.

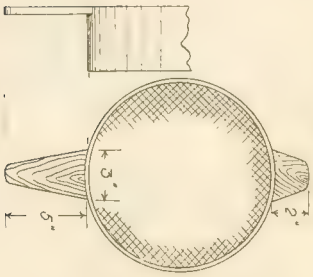


Fig. 5—The pieces fitted to the sieve.

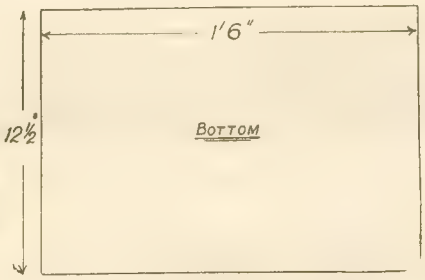


Fig. 7—The dimensions of the base.

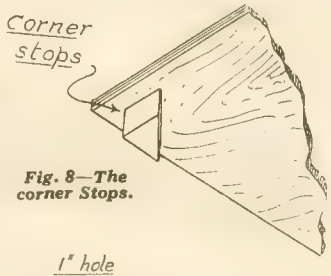


Fig. 8—The corner Stops.

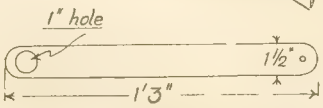


Fig. 6—One of the handle sides.

Mounts for Medals—*(continued from page 499)*

turned out quite a satisfactory bit of work.

Hanging on a wall, these medal plaques are very decorative indeed. The concave glass gives a very slight magnifying effect which adds to the richness of the design, and the bright medal is set off by its glossy black border of pitch.

If in mounting medals yourself you get pitch on the medal or on some part of the glass where it is not wanted, rubbing with a cloth moistened in petrol will remove it. Don't try to chip hard pitch off the glass (it's almost certain to break if you do), and don't heat a soft metal medal.

The medals illustrating this article are:—(A). In commemoration of Queen Victoria's visit to the City of London, 9th November, 1837. (She had been Queen only four months, and was not yet crowned).

(B) In commemoration of the Opening of the Royal Exchange by H.M.G.M. Queen Victoria, 28th October, 1844. Prince Albert had laid the first stone two years earlier.

HOME-MADE MOUNTS FOR MEDALS AND PLAQUES

This is an article on an actual piece of work undertaken by a reader as explained.

SOME time ago, I found myself, as the result of some casual purchases, the owner of a number of medals. None of these was of any outstanding value, and I decided the medals should decorate my walls.

I was in a quandary immediately. I could not crudely bore holes in the medals and hang them up on strings, and if I framed them, one side must be permanently hidden from view. Now the reverse sides of these medals are as interesting to me as the obverse, so I wanted to be able to display and examine both.

Finally, I solved my problem, and mounted my medals so that both sides were available at will, at a cost of about sixpence per medal, plus some very interesting "tinkering." The result was artistic and effective.

First, I obtained some "watch-glasses." For the benefit of those not chemically minded, I would say, that to a chemist, "watch-glasses," are not the front windows of timepieces, but clear, rather thin, concave, circular glasses, similar in shape but much larger. About three inches in diameter with a depth of three-eighths, is a common size.

Chemists use these for evaporating small quantities of liquid, and one special kind is used in the scale-pans of their delicate weighing apparatus. These latter are bought in pairs, and are guaranteed to be of equal weight, within a limit of about one "two-millionth" of a pound.

The Watch Glass

If one of a pair of these glasses is broken, the other is useless, because it cannot be accurately matched in weight, so that chemists frequently have a dozen or two odd weight glasses knocking about. It was with a batch of these, obtained for a few pence from a local chemist that I commenced operations.

These were fortunately three inches in diameter, as no smaller size would have served, so I cleaned them carefully, broke one or two in the process, and set to work.

I gummed together several discs of cardboard, until I had two discs of the same circumference and thickness as the medal. I dusted them round the edges with french chalk, and gummed each of them *dead centrally* in the hollow of the watch-glass. This is a delicate operation, which must be done absolutely accurately, or you will be in trouble later.

Whilst these were drying, I broke up an old high tension wireless battery, extracted the hard pitch, and melted it down on the gas stove, in a can with a lip to it. I was careful not to apply more heat than was necessary to get the pitch just liquid. If it is too hot, it may crack the watch-glass.

Then, with my watch-glasses on a dead level surface, I filled round the cardboard discs with liquid pitch. The secret here is to fill to overflowing as the pitch shrinks slightly on hardening. I took care, to avoid dropping any hot pitch on my fingers as the burns in such cases are like sealing wax burns, very painful.

When the pitch was cold, I fixed a loop of warm knotted wire at the top to form a hanger; the warm wire bedded nicely in the pitch, and the knots anchored it. Then I removed my cardboard discs, and placed the medal, bright and clean, in position. I clasped the glasses tightly together, and waved them rapidly, edgewise, over a gas flame, and they soon united. (Flicking with a bunsen burner is better if carefully done). The medals were hermetically sealed against dust, damp and decay, ornamentally mounted, and could be hung up to show either obverse or reverse.

The Results

The illustrations show the final effect, and also some early mistakes. I have photographed a good and a bad mount to show the snags to be avoided.

Consider the large medal of Queen Victoria in 1837 (A). This was my first attempt, and I made every possible error in material and manipulation. I used watch-glasses of very slightly different sizes. They did not meet properly.

For serious work watch-glasses should be bought by the dozen from suppliers of laboratory apparatus, whose name can be given if required. As exact weight does not matter, cheap glasses at 2/3 per doz. for the 3in. and 4/- per doz. for the 4in. sizes will serve quite well.

I used a 3in. glass on the large Victoria medal. I should have used a 3½in. glass in this case.

I also used roadmaker's *soft* pitch, which "crept." Roadmaker's pitch is quite all right, if you get it hard enough. Bite a piece between your teeth. If it is inclined to cling like toffee, it is too soft. If it crushes into fragments like coal, it is just right. High tension battery pitch is never too soft.

I did not centre either my medal or the hanging loop properly. This is very obvious, both in the photograph and the original, and completely spoilt the job, artistically.

The Victoria and Albert medal was a later effort, and profiting by my previous experience this

(*Continued on page* 498)

A MECHANICAL SEE-SAW MODEL IN WOOD

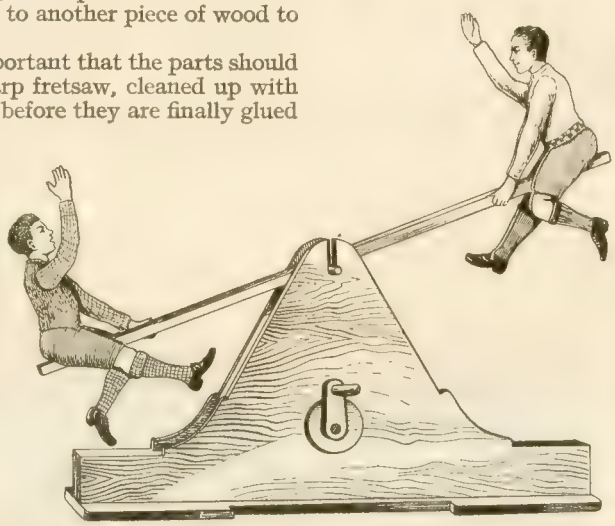
A novel little piece of work for the fretsaw. Full size patterns on the centre pages.

THE patterns in the centre pages of this issue, are for the making of a novelty which will appeal to those readers who want to pass an hour or two with a fretsaw and a few odd pieces of wood.

All the parts shown are cut from any 3/13in. material, and, possibly, plywood would be the best because of its strength. In some cases, it will be noted, two pieces will have to be cut. These can either be done together, or the pattern shown traced off and then pasted on to another piece of wood to be cut separately.

In any case, it is important that the parts should be well cut with a sharp fretsaw, cleaned up with glasspaper, and tested before they are finally glued together.

The finished model is illustrated herewith, and explains clearly what happens. The figures situated at each end work the See-saw up and down when the handle on the side is turned. The action of this may seem a little difficult, but a glance at the interior work at Fig. 1 shows it is quite simple.



The framework of the model is hollow, and the see-saw actuates a pivot strip, into which is cut a long slot. This slot fixes over a small projecting pin on a wheel, on the inside of the turning handle portion. The process, thus, is straightforward, because, as the handle is turned, the pin on the inside moves the pivot strip backwards and forwards, and thus makes the see-saw motion of the figures outside.

The two sides are cut as shown, but one of them should not be fixed until the mechanism has been put right inside. At the same time, it is best to have it cut and cleaned so it can be temporarily placed in position with screws or nails.

Glue one side of the base and then the two short upright pieces (C). The two pieces (D) are laid flat upon them, and can be strengthened from underneath by little blocking pieces of waste wood.

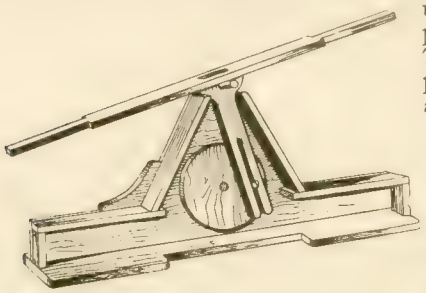


Fig. 1—Details of the mechanism.

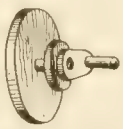


Fig. 2—The driving handle.

The sloping sides (E) have the lower edge chamfered, and the upper edge slightly rounded. The former allows it to bed flat on to the part D, and the rounded top is merely to make it look nicer. Notice the dotted lines on the patterns of the sides to see exactly where these pieces fit, and glue them firmly in place.

The see-saw itself, consists of a long piece to which the figures are glued. Each figure consists of one trunk and head, and two side pieces. The trunk is glued flat on to the platform where it says "Fix figure here" and then one piece of the arm and leg is glued to each side. Notice that two each of these arm and leg pieces have to be cut. In one case the hand reaches down to the side of the see-saw; in the other case the hand is raised upwards.

In gluing, notice that these hands are put the reverse way, done merely by turning the wood round when cut. Glue the whole piece to the centre of the trunk portion and the hand side of the plank.

Another method, is to complete the figure first, and then glue into position on the see-saw. The latter is perhaps better, because the edges can be rounded off with glasspaper and the figure painted up to be more realistic.

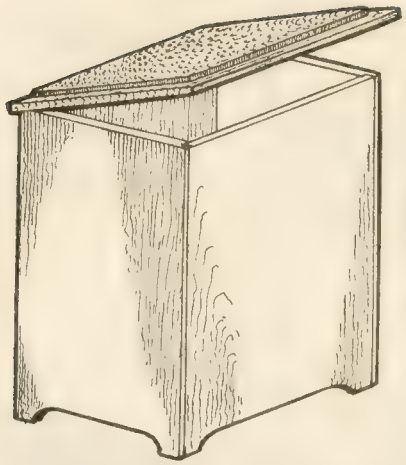
The see-saw is made to rock by the slotted piece which tenons into it at A. At the point B, a piece of dowel 1in. long and $\frac{1}{8}$in. diameter is forced through and glued to serve as the rocker in the appropriate slot in the sides. The detail of the mechanism of the turning handle is given at Fig. 2.

The large circular piece is glued to the end of the shaft (G). This shaft is a piece of 3/16in. dowelling just over $\frac{3}{4}$in. long. A short screw is driven in the position shown in the circular piece, and must be left projecting long enough to form the pin which slides in the slotted piece.

Glue the circular washer (F) on the outside of the side, and then pass the shaft through from the inside, leaving the larger wheel in the interior.

To the outer end of the shaft (G) a little flat crank piece and the handle is glued.

A Bathroom Seat and Linen Chest



HERE is a novel idea of a bathroom stool and dirty linen chest, which can be made easily by the novice at a low cost. The form of construction is very simple and the tools used are to be found in the home of even those who do not pride themselves on being a 'home carpenter.'

Fig. 1 shows the complete piece of work with hinged lid cork faced, to make a comfortable seat. The finished size of the stool is 18ins. by 15ins. by 12ins, which means that for the carcase or box, two pieces of wood 3ft. by 15ins. by ½in. and 3ft. 12ins. by ½in. are required. A piece of stout 3-ply 15ins. by 12ins. for the bottom and for the lid, allowing for overlap, a piece 17ins. by 14ins. by ¾in.

How to Begin.

It is immaterial what wood is used, but yellow deal is very suitable, because the job is to be finished with paint. Plane the wood true and square, marking out rebates on both edges of each side piece. These should be ½in. wide and ¼in. deep. Cut out the rebates and fit the joints together as shown in Fig. 2.

Decoration

It is wise to add a little decoration and the most convenient place is at the bottom. Shape all four sides as suggested. This gives the appearance of the stool having four legs.

In order to fix the bottom in securely, it is necessary to plane four strips of wood, (¾in. by ⅜in. will do) and screw them on the inside to act as a support to which the plywood base is fixed (see Fig. 3).

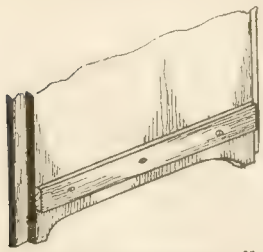


Fig. 3—The floor support rail.

Fig. 4—Suggested Moulding edges to shape.

The front being cut, the bottom shaped and supports fixed, the job is ready to assemble. Glue the joints and brad them through with 1¼in. oval brads at 4in. distance apart and leave to dry.

Preparing the Lid

While waiting the lid can next be prepared. Plane this true and mark out to length and width, leaving an overlap on three edges (not the back) of about ⅝in. On these a moulding can be worked such as is suggested in Fig. 4. If these are too difficult, a simple chamfer is equally effective. When this is done, cut a piece of thin cork matting—which can be obtained quite cheaply, so that it forms a panel for the seat (as illustrated). Glue this into position and leave under pressure for eight hours till dry.

Now the box should be ready to work on again, so fix the plywood bottom by bradding to the support. The lid is hinged to the box with two 1½in. brass butts which are sunk into both lid and box, and a chain or lid support is fixed to prevent the lid from falling right back.

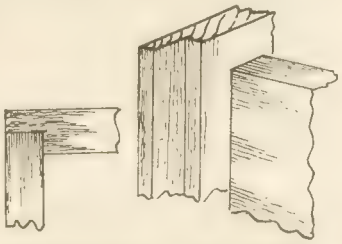


Fig. 2—Two details of the butted corners.

The job is now soundly constructed and requires finishing. As this work is for bathroom use and is likely to get damp, a paint finish is necessary. The colour rests with you and should be chosen to harmonise with the bathroom scheme, if the colour is optional, you cannot do better than use a good white enamel. This always looks well and can easily be washed down.

A Suitable Finish.

First glasspaper the job and then give it a coat of good white undercoating. When this is dry, glasspaper down lightly again and paint with white enamel. You may find that it requires two coats, if so, avoid any possibility of the paint looking "thick."

A very attractive treatment is to paint the stool one colour and the lid another. If these colours are chosen wisely, a desirable effect is obtained.

When the paint is dry, fix the lid again and you have an attractive stool which, in addition to being very useful, helps to keep the bathroom tidy.

Please write your letters to the Editor on separate sheets to your ordinary orders for goods to Hobbies Ltd.

CATALOGUE TERMS EXPLAINED (Continued)

ATTACHED to the bottom of a great number of the older of the Belgian stamps is a small label, on this label is a notice printed, or rather a notice is printed twice, once in Flemish and once in French. The translation of the notice is " Do not deliver on Sunday," so that if it is desired that the letter should be kept until Monday, then the sender of the letter leaves the label attached to the stamp. If the sender wants the letter to be delivered on Sunday, he tears off this small label.

These detachable labels are called " Dominical labels " ; they came into being in 1893, but were discontinued in 1914. The illustration shows one of these Belgian Stamps with the Dominical label attached. This is one of the 1912 issue and one of the last stamps to bear the label.

One rather wonders if it was consideration for the postman—so that he might finish his Sunday round quickly—or if it was because the letter had been sent to a business firm which would not be open on Sunday that this Dominical label should have been allowed to remain in contact with the stamp. The other solution is that it may have been a matter of laziness on the part of the sender.

The point arises in connection with the collection of these stamps —should one keep a specimen of a stamp with a Dominical label and also a specimen of the same stamp without ? Well, philately is a hobby, so do what you wish. But it seems rather a waste of space. Actually, the value of a stamp with the label is reckoned as twice that of one without.

Referring to the notice appearing in two languages, it is also to be observed that the name of the country is printed twice—Belgique and Belgie. Also on the those stamps which show a picture of some famous castle or beauty spot the name of this is printed in French and Flemish. In the near future we must discuss this bilingual question.

THE next illustration shows what is called " Off-centre." It almost appears as though the stamp is torn badly. Yet this is not the case, because the perforation can be seen quite distinctly on each side of the stamp. The cause of this blemish is in the perforating. Stamps are printed in sheets with a space between each imprint. These spaces are called " gutters ", and the space is sufficient to allow the perforation holes to be cut without injuring the design in any way, provided that the sheet of stamps is fed into the perforating machine correctly.

If this is not done properly, then the holes will be misplaced in relation to the design, and so damage it. The specimen shown is a very bad one indeed. One does not often find the perforation so far misplaced but it is excellent for showing what is meant by " Off centre," because the white margin (or gutter) intended for the holes is completely visible.

Off centre specimens are frequently found in connection with the early British Colonials and in consequence of this blemish, the value of such a specimen is greatly reduced. Catalogue prices are, of course for good specimens ; poor copies will only command from one half to one quarter of the quoted price.

THE British stamp overprinted I. R. Official is generally called an official stamp, but the term " Departmental Stamp " is also used to denote any stamp especially intended for postage on letters, etc., sent from government offices. Among the British Officials the following initials are used, and their meaning is also shown :— I.R. Official (Inland Revenue), O.W. Official (Office of Works), R.H. Official (Royal Household). The following explain themselves, Board of Education, Army Official, Govt. Parcels, Admiralty Official. The use of all Official Stamps in Great Britain was discontinued after May 12th, 1904.

"CURRENCY Stamp."—On certain occasions—when for example there is a shortage of metal—which may well occur during war time—stamps have been authorised to be used instead of coins. This happened during the last war, and Russian stamps were made legal tender, on the back of these stamps a notice was printed to say that their value was equivalent to copper or silver coinage. An illustration of one of these stamps appears, or at least the back of one of these and the writing in this case states "Having a circulation on a par with copper money."

NOW we come to one of the great bugbears of postage stamp collectors, the fiscal stamp. A fiscal stamp is one which has been used for the collection of some tax or fee, and has no connection with the payment made for the transmission of a letter parcel, etc. Unfortunately in a great number of cases the post office undertakes the sale of fiscal stamps, but that does not entitle them to a place in a postage stamp album.

The real difficulty is the foreign fiscal stamp. Unless one knows the language, it is a very difficult matter to say for what purpose the stamp was used. Two examples of this should make the position clearer.

Stamp Catalogue Terms—(*continued*)

In France they often place small advertisements in the shop windows, and each of these has to have a stamp attached, cancelled with a date stamp, just like the usual postmark. Such a stamp falling into the hand of some one who does not know anything about the language or stamps of France might be mistaken for a postage stamp.

A second example is the "Entertainments duty" stamps of Great Britain. Sometimes the tax is collected by sticking stamps to the back of the tickets. One of these falling into the hands of a foreign collector might very possibly confuse him into thinking that he had an unusual specimen of the British Stamps.

The illustration is that of a British Transfer Duty stamp—nothing to do with postage at all. Sometimes postage stamps are used for fiscal purposes; our own 2d. stamp has to be affixed to receipts for over £2—such a postage stamp becomes a "Fiscal." High value stamps are sometimes used for collecting fees. Well, if there is no chance of obtaining a postally used specimen then it is not a bad idea to put one such fiscal stamp into the collection provided that the collector makes a note to that effect. Otherwise he or she runs the risk of someone seeing this in the album and thinking that the collector does not know the difference.

MISCELLANEOUS ADVERTISEMENTS

The small "to sell" or "wanted" announcements appearing below are accepted from readers who want to sell anything except fretwork goods, or from usual advertisers of bargains of interest. The advertisements are inserted at the rate of 2d. per word. Name and address are counted, but initials or groups, such as E.P.S. or £1/11/6 are accepted as one word. Postal Orders and Stamps must accompany the order. We cannot guarantee any date for these to appear, but they will be inserted in the earliest issue.

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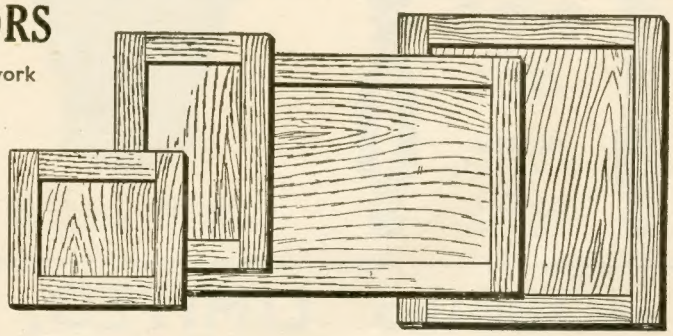

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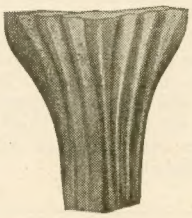

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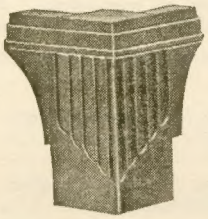

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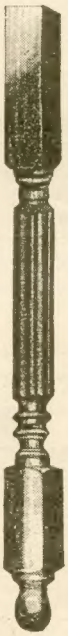

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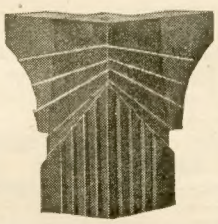

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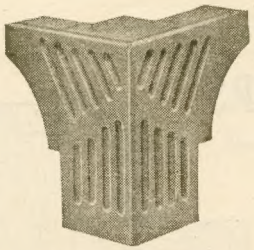

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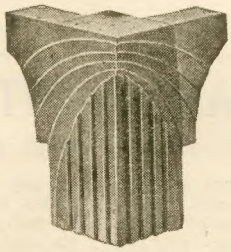

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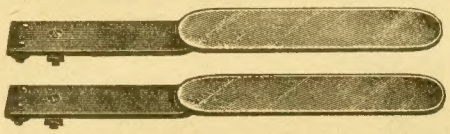

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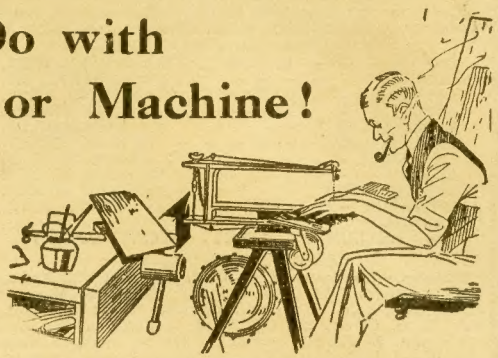

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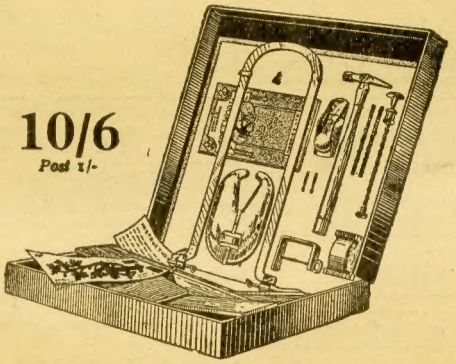

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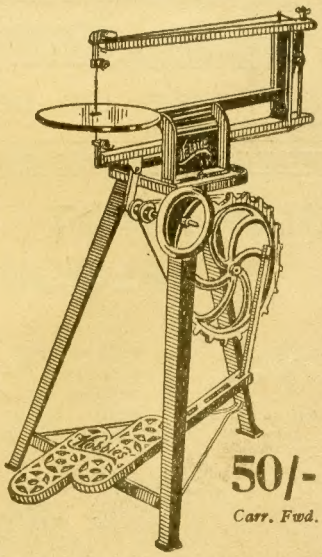

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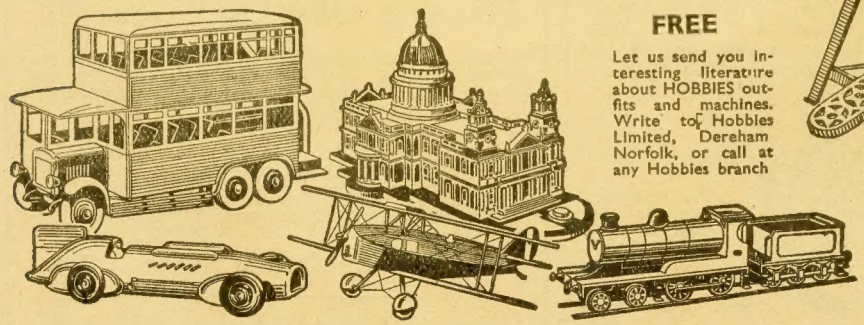

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